Recombinant PSA4 protein (His tag)

Catalog Number	536232
Synonyms	Proteasome subunit alpha 3
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	Q9N599
Gene ID	172139
Molecular Weight	Predictes a molecular mass of 29.94 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 31 kDa band.

Product Information

Sequence Region	1-250
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 1-250 aa (Q9N599) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Proteasome subunit alpha type-4 (Proteasome subunit alpha 3) fragment (residues 1-250) from Caenorhabditis elegans, offering a stable and soluble unit ideal for structural studies and biochemical assays targeting proteasome function. The full-length Proteasome subunit alpha type-4, encoded by the pas-3 gene in Caenorhabditis elegans, is a key component of the proteasome complex. This multicatalytic proteinase complex cleaves peptides adjacent to residues such as Arg, Phe, Tyr, Leu, and Glu at neutral or slightly basic pH, and it exhibits ATP-dependent proteolytic activity, playing a crucial role in protein degradation and cellular homeostasis. The protein is localized in both the cytoplasm and nucleus, highlighting its involvement in diverse intracellular processes.